An Adult Learning Model for Improving Information Management in Family Practice

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BACKGROUND

Family physicians (GPs) in the United Kingdom have been computerising their practices for ten to fifteen years, and approximately 90% of practices are now computerised. Despite these structural changes, however, GPs and their staff are not using their expensive computer systems to their full potential. With the use of information technology in primary care, there is increasing scope for aggregation of clinical data for use in health needs assessment, health gain programmes, and resource allocation.

TRAINING NEEDS AND SOLUTIONS

The use of computers in UK family practice has developed in an unstructured way; the training needs of clinicians and practice managers have not been fully assessed or met. The identification of this information gap led to the authors being commissioned to produce a curriculum specification¹ for information management training in primary care. Its fundamental concern is to promote an understanding of how information systems can be used to improve patient care. An 'adult learning' approach was used throughout^{2,3,4,5}. The JIGSAW (Jumping the Information Gap: Solutions at Work) curriculum specification is being used to inform the inclusion of medical informatics into the wider medical undergraduate and postgraduate curricula.

PILOT STUDY

The JIGSAW approach was used in a pilot study with two practices. They received a variety of training inputs from the authors in order to ascertain the effectiveness of various methods of assessing training needs and delivery mechanisms. Baseline measures of current levels of recording of clinical data were carried out and repeated at the end of the study. To assess levels of knowledge and expertise in information management and computer skills, three questionnaires were administered to all personnel, on data recording, clinical audit, and information management. Some items on the questionnaires were re-administered at the end of the study to assess changes in knowledge and attitudes. A variety of teaching

methods was used, based on data and processes relevant to and selected by the practices. Specific training was given to lead staff members on data reporting and extraction, and basic system administration skills were reinforced.

RESULTS

In the six-month study period both practices improved their understanding of the principles of data and information management and increased their levels of structured data entry. They improved information flows such as test results and referrals to secondary care. They used the computer more during direct patient care, and reported much improved communication and teamwork.

LESSONS LEARNT

The practices had many competing pressures on their time; however, both practices perceived the need to improve data quality and access. The practices reported satisfaction with the flexibility and responsiveness to their needs of the trainers. This study was designed to test the feasibility of the adult learning approach. It is planned to carry out further work with a larger number of practices to test the premise that: "Education and training using an adult learning model is more likely to lead to improved data recording quality than other instructional methods."

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